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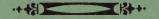
OF THE

LYONDEL GARDENS

LEON H. LEONIAN, Breeder Morgantown, W. Va.



Season of 1940, Spring of 1941





I DO A LITTLE DEBUNKING

Success is a heady wine; few can take it and still retain their equilibrium. The shoemaker does not stick to his shoes but expands into an art critic; the movie Oomph Girl insists in giving authoritative views on literature and metaphysics; the lucky aviator fancies himself a great statesman, and a successful cabbage grower sneers at Mendel. After basking in the admiration of their fellow men, many successful persons, be they artists, scientists, plumbers, or mousetrap makers, begin to develop visions of grandeur and are indignant if someone has never heard of them, or some other person does not agree with them. They fail to realize that when it comes down to brass tacks the majority of the people don't give a continental whether the most important persons on earth live or die. Under the admiring glances of garden club visitors many flower growers and breeders become annoyingly swell-headed. They strut their stuff and mysteriously hint at their breeding secrets, conveying the notion that they have stolen a march on the world's greatest geneticists and plant breeders by developing their own secret formula. Such fool claims have always rubbed me the wrong way, so I am taking time out to debunk this game of flower breeding.

Actually what is the role of plant breeder in the scheme of plant improve-This can be answered by one word, selection. The breeder merely selects the parent plants and the progenies resulting from their union; nature does the rest. Anyone can rub pollen on the stigma, and it does not require an intellectual giant to recognize quality. A few simple rules, available to all who wish to learn them, are all the secrets that any plant breeder needs. The parent plants are provided by nature as species, and by man as named varieties. With these rules and tools the beginner may proceed toward success. But if such is the case, why don't we have more successful brick layers, boiler makers, hair dressers, or tea tasters? For the same reason that only a few persons manage to rise above the masses. Since few are intelligently guided into tasks for which they are best fitted, too many misfits who would be highly successful in some other field of endeavor, are now cluttering our economic system. For instance, I would never make a carpenter because, no matter how hard I try, I cannot saw a board straight or drive a nail without the darn thing bending any old way; I would not make a singer because I cannot carry a note, or an artist, because I cannot draw worth a hang. And maybe you think that I have not tried. All of us may have been born equal, but our abilities run in different directions. In flower breednig 90 percent is knack and 10 percent science. The latter is available to all, but one must be born with the former. However being born with knack for plant breeding, playwriting, advancing science, accumulating wealth, or making goo-goo eyes before a camera does not give one the right to look down upon those who have the knack for baking a better loaf of bread, for digging a better ditch, for dressing tools, or making a better salad dressing. So, my advice to the strutting breeders is "pipe down and be yourselves."

I TAKE YOU NOW BEHIND THE SCENE

HAVE done plant breeding for years, yet I cannot hold candle to the real plant breeders. My knowledge of genetics is modest and my methods unorthodox. I don't care for pioneering outside of my particular field of science; I lack the time and the necessary facilities for an exhaustive breeding program; I am not a genius or a plant wizard, nor do I claim speaking acquaintance with supernatural forces. Consequently, in order to keep the Lyondels among the leading strains I had to resort to short-cuts and began where the other fellow left off. I took his best, mixed it with the best of others and developed a strain after my own notions of delphinium perfection. Year after year I continued

to take the more promising delphiniums of other breeders and to weave the Lyondel pattern. My strain was not allowed to stagnate by inbreeding but has been highly mobile, ever changing, always progressing, and continuously full of surprises. Yet despite all this, the Lyondels possess that stamp of individ-

uality whereby they cannot be confused with other strains.

I do not wish to convey the impression that I regard my strain as perfect. Others are as good or better. I even wish to urge those of my customers who have tried nothing but Lyondels to try some other strain, even if it means not buying anything from me this year or the next. If they find other strains superior to mine, I will rejoice with them, and then I will try to make mine as good or better so that the lost customer will come back. I am for my rivals; their success makes me happy, and I am ready to do all I can to bring to them greater success because my rivals are my best assets; every new customer that they gain is a potential purchaser of Lyondel seeds.

I LIST THE DISTINGUISHING FEATURES OF LYONDELS

THE LYONDEL GARDENS are different from all others because:

1. All seeds offered for sale are produced by artificial cross-pollenization, and no open pollinated seeds are produced or sold at any price because such seeds, in so far as I am concerned, are worthless.

2. Only one grade of seeds is produced, — the highest possible, and there

is only one price.

3. Because I do all my breeding work during my spare hours, I can produce only a limited amount of seeds: I do not trust cross pollinating work to others. Consequently I can afford to practice the most rigid selection of seed

and pollen parents.

4. Except where longevity constitutes the main object of breeding, rarely if ever do I use the same parents in two successive years. Every spring I plant thousands of seedlings and from them select the few breeding plants needed in my work. Usually these are far superior to the older seed parents and naturally are given the preference.

5. Because of a limited output of seeds, I do not wait to build up a stock of the most promising novelties before placing the seeds on the market. No sooner does an outstanding specimen occur that it is made available to my customers. This is one reason why the Lyondels bring to you today the delphiniums of tomorrow; this explains why the novelty loudly acclaimed by

someone else may be old stuff to my customers.

- 6. Lyondels are two-climate products. First they are grown at an altitude of some 3,000 feet where the summers are cool and precipitation abundant; this is ideal for the mildew and affords me the opportunity of eliminating all plants susceptible to this disease. Winters there are very severe and quite long. All plants that cannot thrive under such conditions are again eliminated. The surviving best specimens are then brought to Morgantown where the summers are long and warm, often quite dry, and where the soil is downright worthless. All plants that will not flourish under these conditions are eliminated. This goes on year after year. If natural selection has any meaning whatever, the Lyondels should be able better to withstand all adverse conditions.
- 7. Lyondels bring to you ALL IN ONE. As stated before, every year I test the most promising strains. Many prove to be bitter disappointments, but some give gratifying results. Suppose Strain X gives me half a dozen fine specimens. These are crossed together to intensify the best in Strain X; also they are crossed with the best Lyondels to induce a greater variability and more new breaks. Strains Y and Z are similarly treated. Seeds resulting from these are mixed with the bulk of typical Lyondels to bring to you the worthwhile things in the world of delphinium.

I SIMPLIFY SEED SOWING

CHOOSE any good garden soil, sift it into open frames, flats, or flower pots. Use no organic matter, lime or fertilizer. Level off the soil, then shake a pinch of Semesan with the seeds until every seed is covered with the pinkish dust and sow directly on the surface of the soil; then by means of some flat object press the seeds firmly into the soil. Cover with one eighth of an inch of sifted soil or sand and water gently but thoroughly. Set the pots or the flats thus prepared in a cool and sheltered part of the garden and cover them with one or two thicknesses of burlap. Never allow the surface soil to dry; it is fatal. On the other hand do not water excessively. Within ten or fifteen days the seedlings will be up. Remove the burlap but keep the seedlings protected with a couple of thicknesses of cheesecloth. Where summers are warm, the seedlings should be shaded until the cooler days of September. Harden to direct sunshine gradually. Shortly after the seedlings emerge water them with 0.25 percent solution of Semesan to prevent post emergence damping-off. Do not attempt to sterilize your soil with heat, chemicals, and other means; even experts often experience difficulties with these.

AND NOW LET US UNDERSTAND EACH OTHER

OF COURSE you realize that you are buying hybrid seeds and that at best you are indulging in a gamble; a fascinating one to be sure, but a gamble just the same. I do my best to breed quality and dependability into my seeds, but for the life of me I cannot guarantee anything. You may not obtain any germination, even though my own tests show a perfect germination. After the seedlings come into bloom, not one of them may be worth keeping, although that would be a very strange performance in the face of the experiences of others. However, the possibility is there and I must disclaim all responsibility. You buy at your own risk and in case of failure you have no recourse whatever. If these conditions do not suit you, you may always go to the other fellow.

AS OTHERS SEE THE LYONDELS

MAY EXTOL the virtues of my delphiniums until I am blue in the face, but the wise gardener is not going to fall for my gab. In the long run it is the customer who must decide upon the merit of the goods he purchases. He may fall for a glib tongue once, but he won't a second time. It is for this reason that I do not depend upon my own efforts to sell my seeds. Every year I print excerpts from the letters of some of the friends of Lyondel. Some ask me not to print their letters; I respect their wishes. Others have no objection, but ALL OF THEM enthusiastically do my advertising for me. I am deeply grateful and endeavor to return the favor by redoubling my efforts to develop still better delphiniums.

Westport, Conn., June 14, 1939 'Last year you sent me some 'lilac' seeds for trial. They are now in bloom. It is amazing how many are exactly the same color. The flowers are beautiful; some of them measure 3½ inches across.''—Ralph V. Sollitt.

Waterbury, Conn., Oct. 6, 1939 'I won a first prize with your seedling delphiniums, and a special purple ribbon for the most outstanding entry in the perennial classification, five stalks of Lyondel, delphiniums. . . . When you say the florets attain 3 and 3½ inches you do not exaggerate.''—Lyall H. Hill.

Delphi, Ind., July 10, 1939

"My Lyondels are the largest and the showiest I have. Two beautiful whites; some magnificent specimens with 3 inch flowers. One dark and one light are so fine I named them King George and Queen Elizabeth. Visitors unanimiously say they are the finest delphiniums they ever saw."—Rev. Wm. Grant Smith.

LaGrange, Ind., June 19, 1939

"My last year's seedlings are making a wonderful showing right now. Such gorgeous colors and size. . . . A great many have flowers $3\frac{1}{2}$ inches, and one was over 4 inches."—Mrs. H. G. Erwin.

Moline, Ill., July 4, 1939

"Again this year my delphinium beds have eaused quite a sensation around here. Most of my visitors have never seen delphiniums like mine. I am not growing Lyondels alone, but they are getting their share of honors."—Berg Madison.

Cicero, Ill., July 5, 1939

"Seedlings from your seeds are beautiful. This is the only word I can use because when Webster wrote the dictionary he never saw a Lyondel delphinium. Every time I look at them my heart skips a beat."—Mrs. B. Laska.

Western Springs, Ill., Aug. 28, 1939

"Your delphiniums are now in bloom and no word can describe their beauty. I have grown delphiniums for the past 12 years but in most eases I have had just a few that were worth keeping. I grew your seeds only this year. I have never had such lovely purples and dark velvety shades which distinguish your strain from all others."—Mrs. Geo. J. Vasumpour.

Sandwich, Ill., June 19, 1939

"Each year as my delphiniums bloom there is always some new plant that surpasses all others. This year's outstanding one was your aster-sepalloid type, with flowers approximately 3½ inches in diameter. Of the many thousands of delphiniums that I have grown this one has created the most comment and admiration. The flower formation in this strain is unique and adds considerable charm to an already beautiful flower."—Roland F. Barker.

Webster, Mass., July 14, 1939

"My year old seedlings have just finished blooming and they were the most gorgeous specimens I have ever seen."—Mrs. D. J. Nadeau.

Saint Paul, Minn., February 19, 1940

"Last fall I blossomed a plant from your dark series that was as rich and velvety a delphinium as I have ever seen. It was rick like the glowing velvets in our iris, a rich amethyst tone. To me, this was about the finest flowered delphinium I have ever grown."—Robert Schreiner.

Askov, Minn., June 26, 1939

"Last fall the flowers on the delphiniums from your seed were wonderful. All who saw them wanted to purchase them, but we did not wish to sell until we had more"—Ferndale Nursery.

North St. Paul, Minn., July 27, 1939

"Every plant grown from your seed has been wonderful. I cannot get along without their beauty in my garden."— Mrs. C. Bruce Boody.

Nyack, N. Y., July 16, 1939

"My seedlings went through a severe ordeal but revealed two interesting things: first was the fact that a good many more Lyondels survived the ordeal than another strain, and seeond, they showed their usual beauty of form and color, whereas there were only one or two of the other strains I should care to keep."—Arthur Judson.

Prattsville, N. Y., July 22, 1939 "My delphiniums this year were the best I ever saw. It is certainly a pleasure to plant your seeds and watch the plants come to bloom."—B. H. Arnold.

Huntington, N. Y., July 5, 1939 "I had wonderful delphiniums from your 1937 seeds. Long spikes, all with double flowers measuring from 2½ to 3 inches across. The shades varied from pale lavenders and blues to dark purple and many lilac tones."—Mrs. M. Allen Warren.

Granville, N. Y., June 26, 1939 "From your seeds I have some very fine delphiniums now in bloom. They are in solid colors of lilac and orchid, something different from anything that I have ever had before."—Harold E. Wilson.

'From six packets of your seeds I have over 700 very fine seedlings... From a former sowing of a packet of your seeds I saved some 70 plants from an accidental freeze; 59 of these bloomed their maiden spike. I am cutting the good old adjectives about them and will only say I did not know there were such animals. A very large percentage proved excellent, and there were some over which we got very much excited. There was one with clear and bright purple sepals and white eyes; another one has us all agog, a smoky pastel with a tinge of talisman rose.'—A. C. Brushwiller.

Youngstown, Ohio, July 6, 1939 "Last year I purchased one packet of your mixed seeds but on account of a bad August got only 41 plants; they all survived and 39 of them have bloomed their maiden bloom. They were from 18 inches to 3½ feet tall, and all very fine; 5 whites, all good."—J. F. Wm. Ritter.

Creston, Ohio, June 15, 1939 "I have grown Lyondels for 8 years. I have had misfortunes just as other gardeners, but each time a Lyondel blooms I have forgotten the loss and marveled at the beauty of successive Lyondels."—Mrs. H. A. Stebbins.

Youngstown, Ohio, July 18, 1939. "Out of seed secured from you two years ago I had some of the finest delphiniums I have ever seen except for some my neighbor raised . . . but they were from Lyondel seeds also."—J. Allan Craig.

Wawa, Pa., July 29, 1939 "We obtained no lovelier flowers from other strains than from yours. We are tempted to discard all others."—Hildemere, Gardens.

'You might be interested in knowing that the white delphiniums raised from your seeds all turned out to be whites. There was not a single muddy or green tinted blossom in the lot.''—H. Lee Moore.

Stoys Town, Pa., Aug. 23, 1939 "From a packet of your seeds I got about 60 plants; all are beauties. Some florets measured 31/4 inches across."—Mrs. H. L. Horner.

Rosemont, Pa., July 8, 1939 "I took a blue ribbon with a spike of delphinium raised from your seed, at the annual Inter-Club Flower Show in Philadelphia."—Mrs. William R. Breck.

Nazareth, Pa., June 16, 1939. "I certainly have been more than repaid for the money and effort that went into the package of seed that I purchased from you last year. Of course they are all good, but to date I have 22 that are definitely outstanding."—A. William Day.

Tacoma, Wash., July 11, 1939

"This spring one of your customers gave me a few of your seeds. The first of these are now in bloom and from all indications they will surpass anything I have."—Harry Tiedeman.

Arlington, Va., July 16, 1939

"The seedlings I received from you have all bloomed, and beautifully. They were mostly in colors of orchids and clear blue, and with enormous flowers. I think this is almost unbelieveable success in this hot climate."—Mrs. Wm. D. Walker.

Sheboygan Falls, Wisc., June 29, 1939

"I hope never again to raise anything but Lyondels. As much as it hurts me to waste anything, I shall unhesitatingly throw out all my common delphiniums this fall."—Mrs. Alfred Miley.

Wauwatosa, Wisc., July 2, 1939

"Just returned from one of the county parks where a display of your stock of delphiniums is stopping the parade with its striking colors and outstanding style."—Van V. Lehmann.

Peace River, Canada, Feb. 15, 1940

"I am continually surprising our many visitors with the wonderful new colors and forms from your seeds."—J. B. Early.

Norwich, Ont., July 3, 1939

"I must tell you how pleased I am with my Lyondel seedings. I have never seen such shades in dark blues, purples and pale mauve, although I have grown all the best seeds."—Miss A. M. Woodard.

SEED OFFERINGS FOR 1940

- 1. The novelty for 1940, deepest blackish purple series. Here it is at last! A he-man color, very dark, very intense, and very hot, it appears almost black from a distance. I have seen nothing like this in hybrid delphiniums. It glows and sparkles in the sunshine or under artificial light, truly black velvet come to life. It is still in its formative period, but a surprisingly large percentage of the seedlings come true to color. I am making this available to the more advanced delphinarians as a sparkling shadow of greater things to come.
- 2. Soft bicolors. Great advances have been made in this, the most popular and best developed delphinium. The Lyondel strain has been developed to be pure and clear, free from dull, muddy shades that have cast their blighting shadow on so many of the lighter colored delphiniums. The outers are light, clear blue, and the inners bright mauve or lavender. More attention has been paid to large, well formed, contrasty eyes; in addition, this year's offerings contain a larger proportion of broad sepalloid, round, well developed florets.
- 3. Dark bicolors. Companion plants of the above, these possess deep, glowing blue outers, and inners of flaming purples. Extremely brilliant things with huge spikes and flowers should result from this.
- 4. Lilac self. Developed and offered by the Lyondel Gardens for the first time, this series has swept the country and has set a new color standard. The flowers are absolutely self colored, varying in tone from soft orchid, mauve, lilac to smokies. The huge spikes and flowers will bring to your garden the caress and the enchantment of delicate, soft colors.

- 5. Purple self. Another Lyondel introduction that has been greeted with much enthusiasm in this country and abroad. No other color is found in the uniformity and the purity of purples, violets, and deep orchids. Although a comparatively few seedlings will come true to color, yet a package of seeds should produce a few seedlings with the rare, captivating colors that the pollen and seed parents possess.
- 6. Pure blue self. Perhaps the greatest advances are being made in this color by breeders all over the world. The spikes are getting very long, the flowers larger, and the color is gradually becoming clearer. No delphinium garden is complete without pure, true blue delphiniums.
- 7. Pure whites. The Lyondel standards for white delphiniums are very high and exacting. Only comparatively few plants are reasonably resistant to mildew, and still fewer possess pure, clear white. For this reason it has never been possible to have enough seeds of this to supply the demand.
- 8. Mixture of the above six series. Again I must emphasize that this is not an inferior mixture containing all sorts of undesirable things but that it is made up from all the crosses described above; in addition, it contains many new things as yet too scarce to be classified separately, but possessing qualities second to none.

CONNOISSEURS SERIES

Novelties blooming for the first time this year constitute the parents of this series of seeds. New breaks are more likely to occur here than in the standard series; also more duds. This series is primarily for the experienced and delphinium-wise gardeners. Offered in the same eight series as the standard. Order by symbols, such as C-1, C-2, etc. THIS SERIES WILL NOT BE READY BEFORE NOVEMBER, so please do not ask me to send it to you before then.

PRICE

All seeds are priced at \$2.50 per packet of at least 100 seeds. No half packets sold, and no special mixtures made for anyone. Also, no trade discount. NO EXCEPTIONS WILL BE MADE.

TERMS

Cash with the order. C. O. D. orders not accepted.

WHEN TO ORDER

As soon as you can. Most of my assorted crosses are sold out before the seeds have been harvested. Some seeds will be ready the latter part of July. However it is best to wait until the first week in August when you will obtain more representative seeds. Nothing is gained and much is lost by planting the seeds in the heat of July and early August.

If you fail to receive your seeds by the 7th of August, let me know at once, but not before then, please!

PLEASE NOTE

Poppies and hemerocallis have been withdrawn from market until further notice.

AMERICAN DELPHINIUM SOCIETY

If you wish to know the latest in the world of delphinium, the Yearbook of the Society will bring it to you. Membership dues two dollars a year. Write to American Delphinium Society, Ridgefield, Conn.

VISITORS

Delphinium lovers are always welcome to the Lyondel Gardens. But should they wish to see me personally, they must make appointment beforehand. This applies equally to those who come by the way of thumb, and to those who are driven by their own chauffeurs.



